



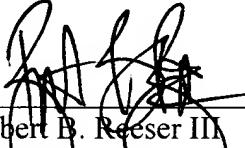
GEH-01-064  
PATENT

### Remarks

The requested amendment to the Specification, as shown above, is for publication purposes and not for patentability purposes. Extraneous text that is not necessary for an understanding of the invention has been deleted from the amended paragraphs. Furthermore, no new text or new matter has been added. Submitted herewith is a marked up version of the paragraphs amended in accordance with the requested amendment to the Specification, shown above.

Applicant requests entry of the forgoing amendment prior to publication and examination of this application. Favorable action is respectfully solicited.

Respectfully Submitted,

  
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GEH-01-064  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: John M. Belcea

: Art Unit 3613

Serial No.: 09/752,276

:

Filed: December 29, 2000

: Examiner:

For: Adaptive Train Model

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**RECEIVED**

APR 30 2001

TO 3600 MAIL ROOM

**SUBMISSION OF MARKED UP PARAGRAPHS**

Hon. Assistant Commissioner for Patents  
Washington, D.C. 20231

Submitted herewith are marked up paragraphs in accordance with 37 C.F.R. 1.121(b).

**IN THE SPECIFICATION**

Please amend the paragraph starting on page 7, line 28, and ending on page 8, line 9, and beginning with the words, "Values  $l_{ij}$ " as follows:

Values  $l_{ij}$  are the "footage" determined by a track database using two successive elevation records. The first and the last sections of the consist should be determined according to the position of the head and the tail of the train with respect with the surrounding terrain. As the train travels, the size of the train sections are changing continuously, thus they are time dependent.

Constraint

$$L_i = \sum_{j=1}^n l_{ij}(t) \quad (5)$$

is verified at each moment  $t$ . The value of  $\cos(\pi/2 - \alpha_{ij})$  is approximately the same as the value of the field "slope" in a track database divided by 100 [(PLEASE DEFINE FIELD SLOPE)].

$E_i(t)$  is determined by

$$E_i(t) = \sum_{j=1}^n l_{ij}(t) \text{ slope}_{ij} / 100 \text{ DB_DIRECTION.} \quad (6)$$



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Please amend the paragraph on page 24, beginning at line 15, ending at line 18, and beginning with the words, "The confidence column", as follows:

The confidence column is determined by the modified ERF [**(PLEASE DEFINE ERF)**] function,

$$1 - \frac{1}{\sqrt{2\pi}} \int_{\frac{-\varepsilon}{\sigma}}^{\frac{+\varepsilon}{\sigma}} e^{-\frac{t^2}{2}} dt$$

Respectfully Submitted,

  
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